US Army Corps of Engineers®

ENGINEERING AND CONSTRUCTION BULLETIN

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Subject: Mass Notification Systems in Military Construction Projects

Applicability: Guidance

1. Introduction: The purpose of this bulletin is to provide guidance on the implementation of mass notification systems in military construction projects. To reduce the risk of mass casualties, there must be a timely means to notify building occupants of threats and what should be done in response to those threats. Mass notification is defined as the capability to provide real-time information to all building occupants, or personnel in the immediate vicinity of a building, during emergency situations.

2. Background: UFC 4-010-01, Design: DoD Minimum Antiterrorism Standards for Buildings, which was issued on 31 July 2002, requires that a mass notification system be installed in all new military construction and major renovation projects for inhabited, primary gathering, and billeting facilities, starting with the FY04 construction program. Inhabited buildings are defined as regularly occupied by 11 or more DoD personnel with a population density of greater than one person per 40 square meters. Primary gathering buildings are defined as inhabited buildings occupied by 50 or more DoD personnel. Mass notification systems are not required in family housing units unless there are 13 or more units in a single building.

3. Guidance: UFC 4-021-01, Design and O&M: Mass Notification Systems, dated 18 December 2002, provides design guidance for the implementation of mass notification systems. The UFC provides for four types of systems:

a. The Individual Building System provides a means to broadcast a warning message, using either a pre-recorded message or a live microphone, and to activate a notification appliance network that consists of strobes and textual displays to alert the hearing impaired. The system can be activated locally within the building, and is the preferred method for implementing a mass notification system within a single facility.

b. The Giant Voice System provides a means to broadcast a warning message over a large outdoor area using a distributed speaker system.

c. The Telephone Alerting System can be used in facilities such as hospitals, brigs, and child development centers, where it may not be appropriate to broadcast a warning to all building occupants. This method can usually be implemented using the existing installation-wide telephone system.

d. The installation-wide control system provides a means to notify occupants of a single building, a group of buildings, or all buildings and spaces that are equipped with a mass notification system, including the giant voice and telephone alerting systems.

4. Implementation: UFC 4-010-01 requires a mass notification system for all eligible military construction projects starting with the FY04 program. As of the date of this ECB, companies that can provide "Individual Building" mass notification systems that are fully compliant with UFC 4-021-01 include: Acoustic Technology Inc. (uses Wheelock Inc. panels), MadahCom Inc. (uses Honeywell Inc. panels), Monaco Inc. (uses Wheelock Inc. panels), and Systems Technologies Inc. (uses Wheelock Inc. panels). All of the listed companies also sell a proprietary installation-wide control system. If the installation has already selected an installation-wide control system, the designer must specify a compatible "Individual Building" mass notification system, which may require a sole-source justification.

5. Future Guidance: A mass notification UFGS is being developed and should be available in the third quarter of FY04. In the meantime, the mass notification UFC, which was developed by the Air Force, provides the technical solutions to the implementation of the mass notification requirement. All UFC are available on the Internet at: http://65.204.17.188//report/doc_ufc.html

6. HQUSACE point of contact for mass notification systems is Bob Fite, CECW-ETE, 202-761-7169.

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